STUDY OF BUDGETING AND CONTROL OF PERSONAL SERVICES EXPENDITURES AT THE UNIVERSITY OF HAWAII

A Report to the Governor and the Legislature of the State of Hawaii

Submitted by the

Legislative Auditor of the State of Hawaii
Honolulu, Hawaii

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FOREWORD

Under a special provision (Section 200) of the General Appropriations Act of 1987 (Act 216), the Legislative Auditor was requested to make a study of faculty salary budgetary shortfalls at the University of Hawaii. The report included herewith constitutes the response to this legislative request.

The request for this study arose out of a supplemental budget request submitted by the university during the 1987 legislative session under which it was indicated that the university would require an additional $1.6 million for each year of the 1987–89 biennium above the amounts already included in the university's regular budget request in order for the institution to cover its actual faculty salary costs. In response, the Legislature appropriated an additional $1.0 million for each year of the biennium and requested that this office study the matter.

The focus of this study was on conditions and events relating to the budgeting and allocation of funds for faculty salaries during the two fiscal years of 1986–87 and 1987–88.

We wish to acknowledge the cooperation and willing assistance extended to our staff by the president, top officials, and other affected personnel of the University of Hawaii.

Clinton T. Tanimura
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Chapter 1

INTRODUCTION AND BACKGROUND

This study of the personal services expenditures of the University of Hawaii (UH) was conducted pursuant to Section 200 of the General Appropriations Act of 1987 (Act 216).

During the 1987 legislative session, UH reported that it would require for each year of Fiscal Biennium 1987–89 an additional $1.6 million beyond the amount included in its original budget request to provide sufficient funds for all existing authorized faculty positions. In response to this request, the Legislature provided $1 million for each year of the biennium "to meet deficits in the faculty salary allocations for permanent positions authorized as of June 30, 1987."[1] The Legislature further mandated the Office of the Legislative Auditor to conduct a study of UH's personal services allocations and any deficits incurred therein. This report contains the results of the requested study.

Objectives of the Study

The objectives of the study were:

1. To identify and describe the university's system of budgeting for and controlling personal services expenditures, particularly in the area of instruction.

2. To determine if and why this system is allowing million dollar or more deficits to recur year after year in UH's faculty salary accounts.

3. To recommend possible corrective actions that will prevent the recurrence of this deficit in the faculty salary account.

Scope of the Study

This study focuses upon the two fiscal years of 1986–87 and 1987–88. The first year was examined on a broad basis to provide a picture of what the situation actually was leading into the current year.

Conditions were examined in more detail for FY 1987–88. This was done first of all because needed information was much more readily available for this year. More important, however, was the fact that this was the first year for which an additional million dollars had been provided by the Legislature. To satisfy the Legislature's request, it was necessary to determine whether a deficit actually existed and the extent to which the supplemental appropriation might be able to meet such deficit.

Organization of the Report

This report consists of three chapters. Chapter 1 is this introductory and background chapter. Chapter 2 discusses the matter of determining the nature and extent of UH's faculty salary budgetary shortfall. Chapter 3 then examines the causes of and possible remedies for the faculty salary budgetary shortfall problem.

Background Relating to the UH Operating Budget for Instructional Programs

Each of the nine campus units of the University of Hawaii is appropriated funds for an instruction program. These units include the University of Hawaii at Manoa (UH–Manoa), the University of Hawaii at Hilo (UH–Hilo), Honolulu Community College, Kapiolani Community College, Leeward Community College, Windward Community College, Maui Community College, Kauai Community

College, and West Oahu College (WOC). In addition to the instruction programs, each unit is appropriated funds for the following programs: (1) public service (except WOC), (2) academic support, (3) student services, and (4) institutional support. UH–Manoa also has an organized research program for which it receives appropriations.

Sources of funding. The major sources of funding for instruction programs are the general fund, federal funds, special funds, and revolving funds. The university depends on the state general fund as the primary source of financing the operations of all its instructional programs. In FY 1987–88, the state general fund comprised 92.6 percent of the university's operating budget for instruction programs; special funds provided 5.1 percent; federal funds provided 0.7 percent; and revolving funds made up the remaining 1.6 percent. This study is primarily concerned with the general fund operating budget for the instruction programs of the university.

General fund appropriations. The instruction programs of the university account for a large part of UH's operating budget. For all programs (including systemwide ones), UH was appropriated $225,916,808 under its FY 1987–88 general fund operating budget. For the nine instruction programs, total appropriations for the same year amounted to $92,239,889, or 40.8 percent of the total operating budget of the university.

UH–Manoa has the largest operating budget for instruction among the nine campus units. It was appropriated a total of $62,852,698 for this purpose, or 68.1 percent of the total UH operating budget for instruction programs for FY 1987–88.

Personal services operating budget for instruction. Personal services costs make up a large portion of the operating budget for instruction programs. For FY 1986–87, the nine campus units were allocated a total of $89,509,953 in general funds for instruction. Of the total amount allocated, $80,105,036, or 89.5 percent, was for personal services, and $9,404,917, or 10.5 percent, was for other operating expenses.

The personal services costs for instruction programs include the costs for faculty; graduate assistants; civil service employees; administrative, professional, and technical (APT) employees; lecturers; casual hires; and student help. Although the faculty personnel category includes instructional faculty, researchers, specialists, and extension agents, our discussion of the faculty salary shortfall will focus only on the instructional faculty positions. As of October 31, 1986, UH-Manoa, UH-Hilo, the community colleges, and WOC had a combined total of 2,014.59 full-time equivalent (FTE) instructional faculty positions at the nine campus units.[2]

Chapter 2

DETERMINING THE NATURE AND EXTENT OF THE FACULTY SALARY BUDGETARY SHORTFALL

In this chapter we focus upon the matter of determining the nature and extent of the faculty salary budgetary shortfall at the University of Hawaii (UH). Due to complications surrounding this determination, it is necessary to examine and understand what is meant by faculty salary budgetary shortfall before probing its causes and possible solutions to the problem which it presents.

Summary of Findings

A budgetary shortfall in faculty salary accounts is apparently a recurring and growing problem at the University of Hawaii. However, due to data accessibility, definitional, and operational factors, it is difficult to obtain a clear overall picture of this situation.

- For Fiscal Year 1986–87, fund transfers provide the best indication of the extent of the shortfall problem, but the situation is confused by the operation of a contingency fund arrangement at the university's Manoa campus. However, the net effect of the contingency fund on the shortfall was negligible, and it is estimated that the shortfall for that year was approximately $0.9 million.
- For Fiscal Year 1987–88, the situation becomes increasingly confused because several divergent estimates using different methodologies have been used to indicate the extent of the shortfall. In addition, the university has employed an inappropriate basis for distributing the extra

funds granted by the Legislature to meet the shortfall. However, a detailed position analysis, the most straightforward way of ascertaining the actual shortfall, indicates a shortfall of only about $1.0 million which equals the extra funds granted by the Legislature to meet the shortfall.

Difficulties Encountered in Trying to Determine Shortfall

The most straightforward way to determine whether or not or the extent to which a budgetary shortfall may exist in the university's faculty salary accounts would be to total up actual salaries for all authorized positions and then compare these totals with the amounts allocated under the appropriations act. If actual salaries exceed the allocated amounts, then there would be a deficit. However, if actual salaries should turn out to be equal to or less than the allocated amounts, then there would be no shortfall.

Upon reviewing the situation at UH while preparing for this study, however, we found that there were several factors which made such an approach difficult, if not impossible, to follow or which added complications to understanding the nature and extent of the budgetary shortfall problem. For example, data accessibility problems and limited resources to overcome these problems made it impossible to carry out a detailed comparison of salaries and allocations for Fiscal Year (FY) 1986-87. On the other hand, while such data are available for FY 1987-88, UH has taken various actions and made several different estimates of the budgetary shortfall which have the effect of complicating and confusing the situation regarding faculty salary accounts for the current year. To cloud matters further, the University of Hawaii at Manoa (UH-Manoa) for both FY 1986-87 and FY 1987-88 has withheld faculty salary and other funds from initial allotments so as to establish a contingency fund to meet various unforeseen needs. Such action can contribute to as well as help alleviate a shortfall in the faculty salary accounts.

In the following sections, we sort through these various matters so as to lay out as clearly as possible the situation regarding faculty salary budgetary shortfalls for both FY 1986–87 and FY 1987–88.

Situation in FY 1986–87

To determine the extent of the shortfall for FY 1986–87, we have relied on information provided by UH which is a fairly good indicator of the shortfall and of the manner in which funds are managed to provide for faculty salary requirements. While we were not able to obtain a complete account of the shortfall amounts for this time period, we were able to identify the major bulk of it.

In general, UH covered the faculty salary shortfall in the instruction programs in the following ways: (1) by transferring funds from other programs (i.e., organized research, academic support, etc.) into the instruction programs; (2) by transferring funds among cost elements within a program (i.e., from the "O" other expenses category for supplies, travel, equipment, etc., into the "A" personal services category which covers salaries), and (3) by restoring funds to instructional programs from reserves (contingencies) created by withholding a small portion of the funds received at the time the university makes its initial internal allotments.

Transfers of funds. Fund transfers are fairly good indicators of the shortfall problem. Based on data from UH's annual report on such transfers for FY 1986–87, UH transferred a total of $888,367 to cover its instructional personal services requirements. This amount basically represents the faculty salary budget shortfall for the year.[1] The transfers by type for each of the three major academic units are shown in Table 2.1.

Table 2.1

Transfer of Funds - Instruction Programs
University of Hawaii System
FY 1986-87

Academic Unit	From Other Programs	From Other Cost Elements	Total
UH-Manoa	$ 327,225	$ 108,065	$ 435,290
Community Colleges	---	274,000	274,000
UH-Hilo/WOC	---	179,077	179,077
Total	$ 327,225	$ 561,142	$ 888,367

Source: University of Hawaii, University Budget Office.

UH-Manoa is the only academic unit with program transfers (totalling $327,225) into its instruction program (UH 101). Transfers of funds between cost elements occurred in the instruction programs in all three major academic units and resulted in increases in funds for personal services totalling more than $0.5 million. Only Maui Community College and Kauai Community College within the community college system did not have cost element transfers. Thus, looking just at fund transfer data, it can be estimated that the faculty salary shortfall for FY 1986-87 amounted to about $0.9 million.

Restoration of withheld funds. The UH regularly reserves a small percentage of its allotted funds prior to making its internal allotments. These reserved amounts are used to form a "contingency fund" to meet emergencies and other unanticipated requirements relating to approved budget programs. In FY 1986-87, $0.5 million was withheld for this purpose from the appropriations for UH-Manoa.[2] The president delegated the management of this fund to the vice president for academic affairs. Deans and directors at UH-Manoa were then able to request funds to augment their original allotments to cover such things as faculty salary shortfalls, increased lectureship requirements, unanticipated requirements for existing programs, new initiatives, equipment, and supplies. If approval was given, the vice president for academic affairs would release the requested supplemental amounts from the contingency fund.

During that year, the vice president for academic affairs released $350,617 of the $500,000 for UH-Manoa instruction programs. Of this $350,617, $221,866 was provided to meet faculty salary shortfalls. The remaining $128,751 was used primarily to offset shortfalls in other current expenses (supplies, equipment, minor repairs and maintenance, travel, etc.).

While nearly 45 percent of the FY 1986-87 contingency fund was thus used ostensibly for the purpose of making up faculty salary shortfalls, in actuality the contingency fund arrangement had a negligible or zero effect on the shortfall situation.

Net effect of contingency fund arrangement. To determine the net effect of the contingency fund arrangement described above, it is essential to recognize first of all that when the contingency fund was created it resulted in a reduction in the amount of funds available for faculty salaries. This is because it represented a flat percentage assessment against all available funds, including funds allotted for personal services. With instructional personal services funds accounting for approximately 42 percent of the total funds allotted to UH-Manoa, this means that approximately $210,000 of the $500,000 (i.e., .42 x $500,000) in the contingency fund came from funds which otherwise would have been available to cover faculty salaries. Thus, no real augmentation of faculty salary funds would occur until this $210,000 limit had been exceeded in the form of releases from the contingency fund for faculty salaries.

However, as noted above, the vice president for academic affairs only released $221,866 to meet faculty salary shortfalls. As a result, the contingency fund arrangement ended up having very little or no effect on the amount of funds available for faculty salaries. Thus, the transfers of funds previously discussed remain the best indicator of the amount of the faculty salary budget shortfall in FY 1986–87. As stated earlier, this indicator reflects a shortfall of approximately $0.9 million.

Situation in FY 1987–88

During the 1987 legislative session, UH submitted an additional budget request for over $1.6 million for each year of Fiscal Biennium (FB) 1987–89 to cover projected shortfalls in the university's faculty salary accounts. In response to this request, the Legislature appropriated an additional $1.0 million for each year of the biennium and specified that these funds were to be used "to meet deficits in faculty salary allocations for permanent positions authorized as of June 30, 1987 . . . ."[4]

In the course of preparing the request for these supplemental funds and of implementing the Legislature's action with regard to it, UH has made several estimates of the projected shortfall and has gone through several manipulations of data to arrive at these estimates and to allocate the additional funds that were appropriated. In the following sections we discuss the several estimates and calculations that have been made by UH with regard to the faculty salary shortfall problem.

Initial projections given to Legislature. In its initial projections of the faculty salary budget shortfall, UH estimated that it would need an additional $1,613,289 for each year of FB 1987-89. The factors cited as contributing to this shortfall were: (1) upward adjustments totalling $525,412 had been made in minimum salaries during FB 1985-87 which had not been provided for in the budget for FB 1987-89; (2) an unrealistic turnover savings deduction had been imposed on the funds budgeted for faculty positions; and (3) legislative reductions made in anticipation of savings from vacant positions were not likely to materialize.[5]

By major academic units, UH projected that the faculty salary budget shortfall would occur as follows:

Academic Units	Shortfall	Percent of Total
UH-Manoa	$ 889,812	55.2
UH-Hilo/WOC	421,477	26.1
Community Colleges	302,000	18.7
Total[6]	$1,613,289	100.0

It was upon this supplemental budget request and projection that the Legislature based its action to appropriate an additional $1.0 million for each year of the biennium and to request a study of the matter.

Projection based on position-by-position analysis. When UH prepared its original budget request for FB 1987-89 and the supplemental budget request submitted during the 1987 legislative session, it had to rely upon an outdated inventory of positions and salaries. Recognizing that it needed a more accurate basis for budget execution for FY 1987-88, the UH Budget Office in June 1987 updated the central position inventory file (PIF) utilizing a position-by-position analysis for the instruction programs in the UH system to determine permanent faculty salary requirements as of June 30, 1987.[7] This was done to provide a basis for determining annual salary requirements for FY 1987-88 and to comply with the special provision governing the use of the additional $1.0 million appropriated by the Legislature.

Based upon this updated information, UH found that its projected systemwide faculty salary shortfall for FY 1987-88 would be approximately $1.0 million. This new estimate was about $0.6 million less than the estimate given during the 1987 legislative session and approximately equal to the additional $1.0 million appropriated by the Legislature. Table 2.2 provides a summary comparison by major academic unit of the two estimates.

Table 2.2

Revised Faculty Salary Shortfall Using
Position-by-Position Data
University of Hawaii
FY 1987-88

Academic Units	Original Estimate	Revised Estimate	Difference
UH-Manoa	$ 889,812	$ 795,892	$ 93,920
UH-Hilo/WOC	421,477	92,905	328,572
Community Colleges	302,000	122,988*	179,012
Total	$1,613,289	$1,011,785	$601,504

Source: University of Hawaii, University Budget Office.

*The revised estimate for the community college was changed from $181,568 to $122,988 based on information received after the proration of the $1 million supplement was completed by the University Budget Office.

As shown in Table 2.2 above, the revised shortfall analysis for FY 1987–88 changed the original UH–Manoa projection downward by nearly $100,000. The position–by–position analysis also drastically reduced the projections for UH–Hilo/WOC and the community colleges from $421,477 to $92,905 and from $302,000 to $122,988 respectively, or by a total of more than $0.5 million. The drastic reductions in the latter two units are due to restricting the shortfall to permanent faculty positions. Original projections included nonpermanent faculty positions such as lecturers. The situation with respect to UH–Manoa is discussed more fully below.

Further adjustments affecting projected shortfall. With the results of the position–by–position analysis, UH felt that the revised estimate of the shortfall still did not portray the full picture of the problem as it affected UH–Manoa. Accordingly, it went through a series of adjustments and revisions to come up with what it claimed to be a fuller and more accurate projection of the faculty salary budget shortfall. The net effect of these efforts has been to add almost $1.6 million to the projected shortfall at UH–Manoa and to increase by two and a half times the overall projected shortfall as indicated by the position–by–position analysis. These adjustments and revisions are discussed below.

The turnover savings adjustment. The first adjustment which UH made to the projected shortfall was to add a "turnover savings assessment" amount to the UH–Manoa projected shortfall. This adjustment totalled $969,399 and its impact on the overall projected shortfall is shown in Table 2.3 below.

Table 2.3

Faculty Salary Shortfall Projections
Including Adjustment for Turnover Savings
University of Hawaii System
FY 1987-88

Academic Unit	Estimate by Positions Analysis	Adjusted Estimate
UH-Manoa*	$ 795,892	$1,765,291
UH-Hilo	92,905	92,905
Community Colleges	122,988	122,988
Total	$1,011,785	$1,981,184

Source: University of Hawaii, University Budget Office.

*The position-by-position shortfall and the turnover savings amounts have been adjusted several times. However, the adjusted estimate for UH Manoa remains the same.

The turnover savings assessment reflected in this adjustment traces back to budget preparation decisions made in late 1986. While it is normal practice in the State's budget preparation process to assess a 5 percent turnover savings amount against the salaries for civil service employees (on the assumption that savings amounting to this much will occur while positions remain vacant due to turnover), turnover savings are not usually assessed on personal services funds for UH faculty positions (on the assumption that substitute arrangements will have to be made when instructional vacancies occur). However, due to timing differences in the UH and state budget preparation processes (UH budget preparation is usually well advanced by the time UH receives the state budget instructions), UH in preparing its

FB 1987–89 budget exceeded the current funding level ceiling set by the Department of Budget and Finance (B&F) by over $0.8 million.

Faced with time constraints, UH elected to show this excess in its budget as a turnover savings assessment against faculty personal services expenses rather than go back and make detailed adjustments throughout the budget to stay within the ceiling set by B&F. Being as its faculty salary budget request was thus reduced by this amount, UH feels this amount should be restored because turnover savings are not normally assessed against faculty salaries. However, we do not agree with such a view. It was the university's decision to assess the reduction against faculty salaries. It could just as easily have assessed it against some other area of the budget, such as other current expenses for travel, supplies, etc. Once it made this decision, it should be willing to live with it.

The situation might be different if this action had actually resulted in available funds being less than the actual requirements for faculty salaries. However, as already indicated, the position-by-position analysis shows that, with the extra $1.0 million appropriated by the Legislature, there are adequate funds available to cover actual faculty salary costs.

Shortfall projection used to prorate supplemental salary funds. Using quite a different methodology, UH came up with still another shortfall projection which it used to prorate among its three major academic units the extra $1.0 million it received for faculty salaries. This projection did not include the turnover savings assessment discussed above, but it was based upon the position-by-position analysis. However, when using the position-by-position analysis, it only took into account those academic departments at UH-Manoa which showed deficits in their faculty salary accounts; it did not consider those which had surpluses or were even with regard to their faculty salary amounts. Thus, the result was not a net amount—that is, the total of the deficits less the total of the surpluses. Instead, it was just a total of the deficits.

The six departments of the College of Business Administration provide a good illustration of the application of this approach. In this instance, there were two departments with no shortfalls, two departments with excess funds amounting to $111,134, and two departments with deficits totalling $181,445. The net deficit for the college, therefore, was $70,335 ($181,445 minus $111,134). However, in developing this projection, only the two departments with deficits were considered. Thus, instead of showing a deficit of $70,355 for the college, a deficit of $181,445 was shown.

By applying this approach throughout the Manoa campus, the UH-Manoa projected deficit was more than doubled from $795,892 to $1,678,616. The latter amount was then used in making the prorata distribution among the three major academic units. The results of this distribution are shown in Table 2.4 below.

Table 2.4

Distribution of $1.0 Million Legislative Appropriation
for Permanent Faculty Positions
FY 1987-88

Academic Units	Shortfall	Pro-rata %	Supplementation
UH-Manoa	$1,678,616	86.0	$ 860,000
UH-Hilo	92,905	4.7	47,000
Community Colleges*	181,568	9.3	93,000
Total	$1,953,089	100.0	$1,000,000

Source: University of Hawaii, University Budget Office.

* After the proration was completed, the community college submitted another revision of its shortfall reducing it to $122,988.

The proration of the extra $1.0 million in this fashion had two adverse effects. First, it resulted in UH–Manoa receiving a disproportionate share of the extra funds. Second, it gave the impression that the extra funds were not sufficient to cover the faculty salary budget deficit when in fact the position-by-position analysis had indicated that the supplemental appropriation was approximately equal to the actual deficit. Table 2.5 shows what the effect would have been if the extra $1.0 million had been distributed according to the results of the position-by-position analysis.

Table 2.5

Distribution of $1.0 Million Legislative Appropriation
for Permanent Faculty Positions
Based on the June 1987 Position-by-Position Analysis
FY 1987-88

Academic Units	Shortfall	Pro-rata %	Supplementation
UH-Manoa	$ 795,892	79	$ 790,000
UH-Hilo/WOC	92,905	9	90,000
Community Colleges*	122,988	12	120,000
Total	$1,011,785	100	$1,000,000

Source: University of Hawaii, University Budget Office.

*This is a revised shortfall amount which was submitted after the proration was completed (See Table 2.4).

Thus, instead of receiving $790,000 which would have been its apppropriate share, UH–Manoa received $860,000. On the other hand, UH–Hilo/WOC received only $47,000 when it was entitled to $90,000 and the community colleges were given only $90,000 when they were due $120,000.

Current services restoration actions at UH–Manoa. In addition to the foregoing calculations and adjustments, UH made further adjustments at UH–Manoa with regard to determining the application of the faculty salary deficit among colleges and departments within UH–Manoa and the use of that campus' allocated share of the $1.0 million supplemental salary appropriation. The university refers to these actions as an effort to restore UH–Manoa's instructional programs to their current services base.

According to UH, another type of faculty salary budget shortfall occurs when the recommended personal services allocation for a college or other instructional unit falls below the college's or unit's appropriation or current services base. The appropriation or current services base is supposed to represent what the costs would be if all authorized positions are fully funded. However, the recommended allocation is usually based upon the prior year's actual expenditures or allocation, subject to some adjustments. Due to vacancies and other factors, programs may not spend or be allocated all the funds to which they might be entitled if full funding of all authorized positions is the objective.

In its approach to the faculty salary shortfall problem, UH defines a shortfall as occurring whenever a program's recommended allocation is less than the program's appropriation or current services base. Moreover, UH has made the policy decision that priority use of UH–Manoa's share of the $1.0 million faculty salary supplementation appropriation should be to restore deficit programs to their appropriation or current services base.

By way of illustration, if College X has an appropriation base of $3,144,558 but a recommended allocation of only $3,008,707, then it may be said to have a current services deficit of $135,851 (the difference between the two preceding amounts). Therefore, to bring this program up to its appropriation or current services base, $135,851 would have to be restored to it. In UH's view, such restoration should be a priority objective in the use of the faculty salary supplemental appropriation.

For FY 1987-88, UH has determined that 7 of UH-Manoa's 20 instructional programs have received allocations which are less than their appropriation or current services bases. Of the remaining 13, 8 have received allotments that exceed their appropriation bases and 5 have negligible differences (i.e., less than $10,000) between their allotments and their appropriation bases. The shortfall for the 7 programs with deficits totals $598,615. In the use of the $860,000 allocated to UH-Manoa to cover faculty salary deficits, first priority was given to restoring the $598,615 to the 7 programs with current services deficits.

After making this current services restoration, only $261,385 (the difference between $860,000 and $598,615) was left to cover other faculty salary shortfalls at UH-Manoa. To complicate matters further, however, the vice president for academic affairs requested that 20 percent of the $860,000, or $172,000, be set aside as a contingency fund for future distribution through his office to cover faculty salary shortfalls at UH-Manoa. Thus, after this additional set-aside was made, only $89,385 remained to cover faculty salary shortfalls at UH-Manoa on any programmed basis.

These actions have important implications because there is no necessary or direct relationship between those programs which have actual faculty salary deficits as revealed by the position-by-position analysis and those programs which show current services deficits as determined by UH. Indeed, the actions can end up being in conflict with legislative intent with regard to the use of the $1.0 million supplemental appropriation. As specified by law, these funds are to be used "to meet deficits in faculty salary allocations for permanent positions authorized as of June 30, 1987."[8] However, when the funds are used to make current services restorations, they are not limited to making up actual deficits affecting faculty salaries of permanent positions authorized as of June 30, 1987, but may be used for personal services costs related to nonfaculty employees.

Combined application of previous adjustments. After going through the various budgetary gyrations discussed above, UH applied them in combination to the 20 instructional programs at UH-Manoa. To illustrate the impact of these combined adjustments, we selected four of the programs for examination (for ease of presentation, the programs are simply designated as A, B, C, and D). The results of this examination follow.

a. *Effects of current services restoration.* Being as UH gave top priority to current services restoration, we looked first at how the four selected programs were affected by this adjustment. The effects are summarized below:[9]

Program	A	B	C	D
Recommended Allocation	$6,194,275	$3,008,707	$2,870,836	$6,306,524
Appropriation Base*	6,028,632	3,144,558	3,137,712	6,213,828
Difference	165,643	($135,851)	(266,876)	92,696
Appropriation Base % Funded	102.75	95.68	91.49	101.49
Amount Received as Current Services Restoration	0	135,851	255,410**	0

*Also referred to as the current services (c/s) base.

** Does not equal difference above because UH Budget Office adjusted amount downward by $11,466.

As can be seen from above, programs A and D received allocations which were in excess of their appropriation bases while programs B and C had deficits. Under UH policy, the latter two had their deficits restored out of the extra $1.0 million appropriation for faculty salaries. The other two with surpluses were allowed to retain their surpluses.

b. *Results of position-by-position analysis and turnover savings assessments.* According to UH, the combined effects of the position-by-position analysis and the turnover savings assessments were used to determine the distribution at UH-Manoa of the funds not used for current services restoration. For this reason, we next looked at the effects of these two factors. These effects are summarized below:[10]

Program	A	B	C	D
Position by Position Analysis	$ (96,540)	($ 70,311)	$ 0	$ 55,254
Turnover Savings Assessment	(96,428)	(50,297)	0	(99,390)
Combined Effects	(192,968)	(120,608)	0	(49,228)
Remaining Extra Funds Distributed*	$ 28,573	$ 17,858	0	$ 6,535

*Of the $261,385 remaining, $172,000 was set aside as a contingency fund to be dispensed by the vice president for academic affairs. Hence, only $89,385 was initially allocated. Allocation of the $172,000 is at the discretion of the vice president and is not determined by formula. The amounts shown here equal 15 percent of the combined effects of the position-by-position analysis and the turnover savings assessments.

The effect of the position-by-position analysis was determined by the relevant personnel and position data supplied by each academic program. Where applied, the turnover savings assessment for each program amounted to 2 percent of that program's appropriation base. However, as can be seen above with regard to program C, not all programs received such an assessment. The two factors were then combined to determine how much of the remaining supplemental salary funds should be allocated to each program. The amounts allocated equal 15 percent of the combined effects for each program.

As indicated above, program C was not affected at all. This is because it showed no deficit as a result of the position-by-position analysis and because it was not assessed any turnover savings. Programs A and B had negative amounts in both categories so that they ended up with relatively large deficits. In the case of program D, however, a surplus resulting from the position-by-position analysis served as a partial offset against that program's turnover savings assessment. Hence, its base for receiving extra funds was relatively small.

Net effects of all adjustments. After going through the two preceding steps, we looked at the net effects of these various adjustments. Two types of overall effects were examined: (1) total allocations to each program relative to that program's appropriation or current services base; and (2) the distribution of supplemental salary funds to each program relative to the program's faculty salary deficit as revealed by the position-by-position analysis, which is the only actual deficit incurred by each program. The results of this further examination are set forth below:[11]

Program	A	B	C	D
Current Service Restoration	$ 0	135,851	$ 255,410	$ 0
Remaining Extra Funds Distribution	28,573	17,858	0	6,535
Initial Recommended Allocation	6,194,275	3,008,707	2,870,836	6,306,524
Revised Allocation	6,222,848	3,162,416	3,126,246	6,313,059
Appropriation Base	6,028,632	3,144,558	3,137,712	6,213,828
Appropriation Base % funded	103.22	100.57	99.63	101.60
Deficit Indicated by Position-by-Position Analysis	(96,540)	(70,311)	0	55,254
Total Extra Funds Provided	28,573	153,709	255,410	6,535

With respect to the appropriation base for the four programs, the above summary reveals that the net effect of these various adjustments has been to bring their total allocations very close to their appropriation bases. The range is from 99.93 percent for program C to 103.22 percent for program A. If the objective of the $1.0 million supplemental appropriation had been to achieve this goal, then it might be said that the very complicated procedures followed by UH as described above were successful in carrying out their objective.

However, we question whether this was indeed the purpose of the extra $1.0 million appropriation. If it were not, then these manipulations were inappropriate, and the result of them has been to misapply the supplemental funds. It is our view that the intent was to cover actual deficits, not theoretical deficits, insofar as faculty salary accounts are concerned. In other words, first priority should have been given to taking care of those situations where allocated funds were not adequate to cover the actual costs of the affected authorized positions. As stated earlier, the straightforward way to do this would be to make a position-by-position analysis to determine where deficits might exist and then to use the supplemental funds (as well as salary surpluses) to meet those needs. The university took this appropriate first step but then failed to use the results as its guide to action. Instead, it went through the very complicated process set forth above to carry out a different objective.

The summary set forth above portrays the diverse effects the university's procedure had with respect to the actual faculty salary budget deficits as determined by the position-by-position analysis. Program A had an actual deficit of $96,540, but received only $28,573 to cover this deficit. Program B had a lesser deficit ($70,311) but received additional funds ($153,709) which were more than double its deficit. In even sharper contrast, program C had no deficit at all but received the largest supplemental allocation ($255,410) among the four programs. Finally, there was program D which had a $55,254 surplus in its faculty salary account but was allocated an additional $6,535.

On an overall basis, the cumulative effect of the various actions described above is to add $1,368,014 to UH's projected deficit for UH-Manoa beyond the $795,892 deficit revealed by the position-by-position analysis and to increase by two and one-half times the UH systemwide projected deficit based on the position-by-position analysis. Thus, instead of the $1.0 million shortfall indicated by the position-by-position analysis for FY 1987-88, UH is claiming a shortfall of almost $2.6 million which breaks down as follows:

Academic Units	Cumulative Projected Shortfall	Percent of Total
UH-Manoa	$2,363,906	91.6
UH-Hilo/WOC	92,905	3.6
Community Colleges	122,988	4.8
Total	$2,579,799	100.0

As indicated earlier, the $1.0 million supplemental appropriation for meeting deficits in UH's faculty salary accounts is approximately equal to the actual deficit that exists for FY 1987-88. This is true with respect to the entire UH system. However, under present policies and actions of the university, the whole matter of the faculty salary budget deficit has become thoroughly confused and the supplemental funds are not being used for their intended purpose. For one thing, actions have been taken on the basis of a theoretical deficit instead of the actual deficit that exists. For another thing, UH-Manoa has been allocated a disproportionate amount of the funds as noted earlier. Moreover, as brought out in the above discussion, the funds allocated to UH-Manoa are not being used to meet that campus' actual deficits. It is our view that UH should bring its policies and actions into conformance with legislative intent.

Final note concerning contingency funds. In the preceding discussion we point out that UH created a contingency fund at UH-Manoa of $500,000 in 1986-87 by withholding a small percentage of funds from allotments at the beginning of the year. We note, too, that another contingency fund of $172,000 was created out of the supplemental amount allocated to UH-Manoa for the current year. In addition to the latter, UH has created a $200,000 contingency fund for 1987-88 comparable to the $500,000 fund set up in 1986-87. Although there are merits to having some type of contingency fund, it should be recognized that the manner in which these particular funds operate can complicate and confuse matters with respect to faculty salary deficits.

In the case of the 1986-87 contingency fund, it had no appreciable net effect on the faculty salary budget deficit. However, there are many at the university who are under the impression that the contingency fund enabled it to cover almost $0.25 million in faculty salary deficits. With regard to the $172,000 supplemental appropriation contingency fund, we did not have information as to its use at the time of the writing of this report. However, it is possible for it to be used for purposes other than covering actual deficits as revealed by the position-by-position analysis. To the extent this happens, it will be contrary to legislative intent.

Finally, there is the regular $200,000 contingency fund for 1987–88. Being as this was created by withholding funds from the regular allotments, approximately 42 percent of it, or $84,000, represents funds which otherwise would be available to pay faculty salaries. This means that at least this amount should be used for faculty salaries if actual deficits occur in the faculty salary accounts. However, the vice president for academic affairs, who administers this fund, has served notice that none of this contingency fund will be used to make up for faculty salary deficits inasmuch as the supplemental appropriation is available for this purpose. If this actually happens, then the contingency fund itself will end up contributing $84,000 to UH–Manoa's overall faculty salary deficit.

In view of the foregoing, we feel that UH should review and reevaluate its approach to dealing with contingencies.

Recommendations

We recommend that the university reassess its whole approach to the matter of identifying, defining, and explaining what it means by faculty salary budget shortfall and how this problem should be handled.

We also recommend that the university reevaluate its policies and actions with regard to the use of the supplemental appropriation for faculty salaries so as to bring them into conformance with legislative intent as closely as possible.

We further recommend that the university take another look at its practices with regard to contingency funds so as to make sure they help with the solution of problems rather than add to or complicate problems.

Chapter 3

CAUSES OF AND POSSIBLE REMEDIES FOR THE FACULTY SALARY BUDGETARY SHORTFALL

After portraying in the preceding chapter the nature and extent of the faculty salary budgetary shortfall at the University of Hawaii (UH) for the two most recent fiscal years, we turn in this chapter to an examination of the causes of and possible remedies for this recurring shortfall.

Summary of Findings

1. The most immediate causes of the faculty salary budgetary shortfall at the University of Hawaii are: (a) the failure to maintain an up-to-date position and personnel data base, and (b) a lack of consistency between actual personnel practices and the assumptions used to prepare the university's budget.

2. Underlying the foregoing shortcomings, however, is the more fundamental lack of an overall approach to personnel management at the university, including a comprehensive framework for dealing with compensation administration.

3. Another fundamental weakness underlying the foregoing shortcomings is a misfocused and inadequate budgeting process which fails to look at needs and resources in broad perspective and in terms of adjusting to change, maximizing the utilization of existing resources, and encouraging improved performance.

Main Center and Causes of Problem

Mainly a Manoa campus problem. The faculty salary shortfall is largely a University of Hawaii at Manoa (UH-Manoa) problem as illustrated in the previous chapter. The faculty salary shortfall at UH–Manoa is identified to be at least 75 percent of the system shortfall. Personal services costs for UH–Manoa are nearly 50 percent of total requirements for the system and over 75 percent of the Manoa campus requirements. Various factors have been cited as contributing to the faculty salary deficits at UH–Manoa, including higher salaries to meet needs in high demand fields, the incentive early retirement plan, and faulty budget assumptions. UH also contends that cuts of essential positions by the Legislature have had a detrimental effect on faculty positions and salaries over the past few years.

In general, the situation is quite different at the other two major academic units, the University of Hawaii at Hilo/West Oahu College (UH–Hilo/WOC) and the community colleges. At those two entities, the deficits are much smaller and are attributed mainly to the effects of raising salaries to meet new minimums and to make in–step adjustments.

Due to these differences, most of the discussion that follows relates to UH–Manoa.

Most immediate causes. Although other factors may have contributed to the shortfall at UH–Manoa, the deficit derives most immediately from two shortcomings affecting the preparation of the personal services budget. First, UH has failed to maintain an adequate personnel data base for the preparation of its personal services budget. Second, actual personnel practices are inconsistent with the assumptions underlying the preparation of the personal services budget, especially for instructional faculty.

Failure to Maintain an Updated Position and Personnel Data Base

To determine the personal services requirements for the UH operating budget, the most current and accurate personnel salary data must be available.

Unfortunately, for about two years, UH did not maintain and update a central computerized position inventory file (PIF) it developed some years ago. As a consequence, the FB 1987–89 budget was based on outdated personnel data thereby causing some instruction programs to incur deficits in their personal services budgets (while allowing others to develop surpluses). Although other factors were involved in the shortfall (by virtue of causing position and personnel changes), the outdated PIF itself explains or accounts for much of the discrepancy of about $1.0 million between what was originally requested in the budget for UH systemwide and what was needed to cover the actual costs of authorized positions.

Prior to January 1986, the systemwide Personnel Office, under the vice president for administration, maintained PIF. With the administrative reorganization of the university (including the Personnel Office) in 1986, various personnel functions and management of faculty records were delegated down to the colleges at UH–Manoa and to the chancellors of UH–Hilo/WOC and the community colleges. The systemwide Personnel Office was no longer responsible for auditing and monitoring personnel transactions, particularly for faculty positions at UH–Manoa. As a result, no central office or agency was assigned the responsibility of maintaining PIF.

Thus, in preparing the FB 1987–89 budget, the information used for the personal services portion of the budget by the Budget Office was the outdated PIF, which was the only systemwide information readily available at the time. This situation continued to prevail through the 1987 legislative session. While not designated as the office to maintain PIF, the Budget Office out of necessity assumed this responsibility in May 1987 when it was preparing to implement the budget for FY 1987–88. At that time, it sent the outdated PIF to the various administrative units within the university system and requested them to update it with regard to their particular units.[1] The data thus provided were used to make the position-by-position analysis by which the Budget Office came up with its first projected faculty salary budget shortfall based on current data.

When the results of this updated PIF were compared with the personal services amounts included in UH's original budget request, it was determined that the budget request fell short of actual requirements by $1,011,785. As noted in the preceding chapter, this actual shortfall was approximately equal to the $1.0 million supplemental appropriation that had been provided by the Legislature. Of the 20 colleges and schools at UH-Manoa, 7 showed significant deficits while 5 had negligible shortfalls (i.e., less than $10,000); the remaining 8 reflected surpluses.[2]

While all differences contributing to the overall shortfall would not have shown up at the time UH was preparing its budget request, a great many of them would have been apparent at the time UH submitted its supplemental budget request midway through the 1987 legislative session. Without current data, however, UH submitted a request for $1.6 million instead of the $1.0 million reflected in the June 1987 update. With a current PIF, such a large divergency should not occur.

The Budget Office informs us that it intends to request such an updating of PIF on a quarterly basis. However, this will still require a great deal of manual effort throughout the university system and will provide results which will be reasonably accurate only once a quarter. The computerized PIF has the capability of being updated continuously, but this requires that: (1) some entity be given the responsibility to maintain PIF, and (2) this responsible entity have the capability to input changes into PIF as they occur. At present, however, neither of these requirements is being met.

Lack of Consistency Between Personnel Practices and Budget Preparation Assumptions

Although it is important to have a position and personnel inventory that is as current as possible, it should be recognized that such an inventory can reflect changes only as they occur. The inventory system itself cannot and should not control or determine the changes that take place or predict future changes. At the same time, it must be borne in mind that changes are inevitable due to deaths, resignations, transfers, promotions, new hires, and other occurrences. With the long time interval that occurs between budget preparation and budget execution, it is equally inevitable that what the inventory shows at budget preparation time will not be the same as what it shows when it comes time actually to spend funds for personal services. Hence, it is impossible to use what existed at the time of budget preparation as an ironclad guide for making expenditures.

Faced with this type of situation, it is necessary for the budget preparers to make some assumptions about the likely effects of changes that will occur up to the end of the fiscal year under consideration. There is no way to assure 100 percent accuracy, of course, when assumptions are being made about future events. Nevertheless, through experience and through the establishment of and adherence to appropriate personnel policies, it is possible to arrive at reasonably valid assumptions upon which to project and base budgetary requirements. However, if the budget preparation assumptions are not so soundly based, then it is not only possible but also probable that problems will be encountered. Such problems can undermine the effectiveness of the budgetary process as a means of management control and can result in misallocations of resources.

When we looked at UH's personnel planning, management, and budgetary policies and practices, particularly with regard to instructional personnel, we found considerable discrepancy between actual practice and the budget preparation assumptions being followed at the university. This lack of consistency is a primary cause of the faculty salary budget shortfalls that have been experienced by the university.

Three key budget preparation assumptions. There are three key budget preparation assumptions relating to instructional personnel at UH which help to determine whether the funds requested will be adequate to meet actual needs. To the extent they are valid, they should contribute to the attainment of this objective. However, if they are not valid, then it should come as no surprise that appropriations may not be adequate. These three key assumptions are as follows:

1. New and vacant positions generally will be filled at Step 1 of the lowest applicable faculty rank (usually at the assistant professor level).

2. Faculty replacements for faculty who resign, retire, die, etc., will be paid at rates lower than or comparable to the rates of the persons they are replacing.

3. Retirements and resignations will generate savings which can be used to offset the higher salaries paid to new hires who are employed above the first step and to fund the costs of merit pay increases and promotions.

The results of our examination of each of these assumptions relative to actual practice at UH are set forth below.

Filling of new and vacant positions.[3] University, executive, and legislative budget analysts for many years have operated on the general assumption that most new and vacant instructional faculty positions will be filled at Step 1 of the assistant professor rank. However, the actual practice in recent years has been for most new faculty to be hired at much higher steps and, in numerous instances, at higher ranks.

An analysis of the new faculty hires at six colleges at UH–Manoa in FY 1986–87 revealed that of the 101 (78.97 FTE) new hires, only 17 (9.35 FTE) were hired at Step 1 among the three ranks—14 (7.10 FTE) at the assistant professor rank (I3), two (1.25 FTE) at the associate professor rank (I4), and one (1.00 FTE) at the professor rank (I5). All the rest (84) were paid above the first step of their respective ranks.

Of the 58 (46.70 FTE) newly hired assistant professors, 49 (37.70 FTE) were hired from Steps 1 through 11 within the salary range from $22,728 and $33,648. The remaining nine (9.00 FTE) new faculty were in high demand fields, where UH policy allows extra high starting pay, and they were hired at Steps 12 through 17 within the salary range which extend from $34,992 through $42,060. Of the remaining 43 (32.27 FTE) new faculty, 15 (11.95 FTE) were hired at the associate professor rank at salary Steps 1 through 11 ($28,752 – $42,576) and 28 (20.32 FTE) were hired at the professor rank from salary Steps 1 through 17 ($34,992 – $64,752).[4]

Based upon this sample (but excluding the 10 high demand new hires where a policy decision had been made to hire above the regular salary range), the extra cost impact of current hiring practices at UH–Manoa is shown below:

Professor Rank	FTE	Annual Salary at Step 1	Cost Assumption at Step 1	Actual Cost UH-MANOA Hiring Prac.	Difference
Assistant	37.70	$22,728	$ 856,846	$ 989,775	$132,929
Associate	11.95	28,752	343,586	429,544	85,958
Full	19.32	34,992	676,045	906,983	230,938
Total	68.97		$1,876,477	$2,326,302	$449,825

As can be seen above, the practice of not hiring all of the new faculty members (not counting those in high demand fields) at the first step in the respective salary ranges added almost $0.5 million to the UH-Manoa budget above what would be normally assumed for new and vacant positions. Moreover, this is after disregarding the fact that almost half of the new hires were at ranks above the assistant professor level. The effect of hiring 31.27 (11.95 plus 19.32) fulltime equivalent new hires above the assistant professor level (apart from the effect of hiring above the first step) was to add $308,927 to the costs of hiring these new employees. Thus, the combined effect of hiring above Step 1 and above the assistant professor level for this sample of new hires was to add $758,752 to what it would have cost if all had been hired in accordance with the relevant budget preparation assumption.

In short, noncompliance with the budget preparation assumption meant that the budget was short by about $0.76 million in terms of meeting the actual salary requirements of the affected 91 (68.97 FTE) individuals. This is the amount that had to be saved elsewhere (i.e., from savings from other personal services accounts or from funds appropriated for supplies and equipment) in order for UH to stay within its overall budget.

It should be recognized, of course, that UH might not have been able to recruit the quality (or even the quantity in some cases) of instructional staff it feels it needs if all new hires had to be hired at the first step of the assistant professor rank. Indeed, in our interviews with the affected deans, this was a point which they strongly made. On the other hand, to honor the budget preparation assumption more in the breach than in its observance is to render the assumption useless in terms of meeting budget management needs. If the budget is to serve as an effective management tool, then either appointment actions will have to conform to this assumption underlying the budget or this budgeting assumption will have to be changed to reflect more accurately actual practice.

Hiring replacements. Another long accepted budget assumption affecting UH-Manoa faculty is that replacements will be paid salaries that are less than or comparable to the salaries of the persons they are replacing. Often those who are separating are at senior levels and it is thought that their successors will more than likely be less senior--in rank, in service, or in both rank and service. Even when junior faculty leave, it is assumed that their replacements will start at Step 1.

Our analysis of the salaries of replacements at three UH-Manoa colleges hired during FY 1986-87 indicates, however, that the majority of replacement faculty receive salaries higher than those of the persons they have replaced. Using one of the three colleges as an example, we found that during FY 1986-87, nine new faculty were hired as replacements to fill eight vacant positions (one position was split between two persons with partial appointments). In six of the positions, new faculty received salaries which were higher than those of the former incumbents. The differences between the salaries of the new faculty and the previous incumbents ranged from $5,760 to $21,624. The remaining two faculty positions were filled at or below the salaries of the previous incumbents with a saving of $20,322 to the college. For this college, the net cost of filling all eight positions was $44,328 above the assumed replacement salaries of the incumbents.

The deans of the affected colleges indicated that they must hire faculty at higher salaries in order to be competitive with the national market, especially in the high demand disciplines such as business, the sciences, engineering, etc. As a result, personal services budgets are felt to be very inadequate when replacements have to be hired. As in the case of the first assumption, however, the budgeting process fails to make sense if such a wide disparity exists between what is assumed when the budget is prepared and what actually happens when the budget is implemented. Either the assumption, the practice, or both must be changed to achieve a much higher degree of consistency than that which is now being attained.

Low or nonexistent turnover savings. For civil service positions throughout the Hawaii state government (including those at UH), a 5 percent turnover savings is generally assessed during the budget preparation process based on the assumption that this amount of savings will be generated overall as positions remain temporarily vacant due to personnel turnover. No such assessment is usually made against faculty positions at UH on the assumption that substitute arrangements will have to be made for instructional personnel who leave. This does not mean, however, that it is assumed that no savings at all will occur as a result of faculty turnover. Rather, the assumption is that such savings will be less than 5 percent but will still be adequate to offset the higher salaries paid to new hires who are employed above the first step and to cover the costs arising from merit pay increases and promotions. Hence, no additional funds are provided in the budget for these purposes.

Our examination revealed, however, that in many instances little or no turnover savings are generated, certainly not sufficient to cover the higher salaries granted to most new hires and replacements and the costs of merit increases and promotions. First of all, it is often necessary to hire lecturers or graduate assistants to handle temporarily the teaching loads assigned to faculty who depart the university. What little may be left after making these arrangements is quickly absorbed by the higher salaries of newly hired faculty.

The incentive early retirement program is another reason why little or no turnover savings are generated in UH's faculty salary accounts. The program allows an employee to retire and at the same time continue part-time employment with the university.[5] Under the terms of the program, participants may be on post-retirement employment in a position up to a 40 percent fulltime equivalent (FTE) for no more than three years.[6]

Generally, early retirement participants are placed in temporary .40 FTE positions. Thus, they receive 40 percent of the salary which they were receiving prior to retirement. It is assumed that the permanent position vacated by the participant will then be filled by a new faculty member whose salary will be less than or equal to 60 percent of the retiree's salary. The concept is good, but sometimes the combined costs of the participant and the new faculty member either equal or exceed the retiree's previous fulltime salary so that there may be little or no savings at all, or even added costs. On an overall basis, only minimal savings result from this type of retirement.

During FY 1986-87, for example, five of the six sampled colleges had 20 faculty participants in the early retirement program. With a few exceptions, the retirees were replaced by new faculty. For these cases, the combined salary total for the retiree and the replacement exceeded the retiree's previous fulltime salary in 9 out of 20 cases, totalling $34,069. The combined salary total was less than the retiree's prior salary in 11 out of 20 cases, resulting in savings of $48,575. The net effect for the five affected colleges was a savings of only $14,506, or only just about enough to cover the salary of a half-time assistant professor position at the lowest step. Such results clearly demonstrate that the incentive early retirement program provides limited turnover savings, if any. Indeed, the program combined with current hiring practices can end up adding to rather than decreasing the overall faculty salary budgetary shortfall.

Viewed broadly, then, it can be seen that turnover savings are not being generated and used in the manner that is assumed will occur when the UH budget is prepared. As noted with regard to the two previously discussed budget preparation assumptions, it becomes meaningless and fruitless to go through the whole budgetary process when such a wide disparity exists between budget assumptions and management practices.

Lack of an Overall Approach to Personnel Management and Compensation Administration

The problems and shortcomings discussed above in Chapter 2 and in preceding portions of this chapter all point to a more basic condition affecting UH—that is, its fundamental lack of an overall approach to human resources management, including a comprehensive framework for dealing with compensation administration. This lack is a long-standing one, but has been magnified by recent management actions taken at UH to reorganize its administrative structure and to decentralize much of the decisionmaking and administrative processing with regard to faculty personnel. Included in these actions was the dismantling of much of the systemwide Personnel Office and the assignment of many of its staff members to other units in the UH administrative hierarchy.

Currently then, the Personnel Office is primarily responsible for nonfaculty personnel—that is, civil service employees; administrative, professional, and technical (APT) staff members; and executive and management personnel.

Personnel decisions regarding instructional personnel are the primary responsibility of the chancellors outside of UH–Manoa and of the deans and directors at UH–Manoa. With 20 colleges and schools at UH–Manoa, this means there are at least 20 different persons making decisions affecting faculty personnel on that campus.

Under these existing arrangements, it is extremely difficult, if not impossible, to take any sort of consistent and comprehensive approach to personnel management and compensation administration. The failure to fix responsibility for and maintain the centralized position and personnel inventory discussed earlier is but symptomatic of the overall situation. Another telling indicator is UH's approach to the faculty salary budgetary shortfall; it treats the matter strictly as a budgetary problem and fails to recognize that it also has important personnel and compensation management ramifications. To achieve consistency between budget preparation assumptions and actual personnel practices, for example, it should be approached from both perspectives.

In 1981 as a result of a management audit that we had conducted, our office recommended that UH establish an office at the vice presidential level which would be responsible for human resources management on a systemwide basis, including both faculty and nonfaculty personnel.[7] This was in recognition of the fact that the university's staff is its most important resource as well as the major use of funds appropriated to the university.

Similar findings and recommendations have been included in our 1987 and 1988 reports to the Legislature in which we review and evaluate the administrative reorganization of the university initiated in early 1986.[8] Our findings and recommendations in this area have been largely echoed by a management consultant which the university itself commissioned to look at its personnel management program.[9]

In making this recommendation, we do not mean to imply that all personnel and budgetary decisionmaking should be highly centralized. Rather, it is our position that there is a need for central leadership with regard to the university's human resources which can look at personnel management and compensation matters on a comprehensive and integrated basis and can serve as an establisher of standards, a clearinghouse for information, an advisor to line managers, and overall monitor of activities affecting human resources management.

After examining the faculty salary budgetary shortfall problem, we are convinced even more that UH needs to take a top level, comprehensive approach to the whole matter of personnel management and compensation administration.

Misfocused and Inadequate Budgeting Process

In addition to the lack of an overall approach to human resources management, our investigation also indicates that there are some basic weaknesses in UH's general approach to budgeting which have contributed significantly to the faculty salary budgetary shortfall situation. Indeed, this latest study has served to confirm previous findings we have made regarding UH's budgeting process. In discussion which follows we review the budgetary shortcomings underlying this problem.

Persistence of previously identified budgetary shortcomings. In January 1983, we submitted a report to the Legislature on a budget review and analysis of UH which we had conducted during the previous year.[10] In this report, we pointed to several serious flaws which distorted and thwarted the use of the budget as an effective management tool in helping the university fulfill its mission. Summarized below are some of our key findings at that time:

1. Although current services represented 98 percent of UH's operating budget, existing budgetary procedures neither allowed for proper program review and analysis of this major segment of the budget nor permitted broad participation by the university community in shaping what was by far the largest part of the budget.

2. By treating all campuses within the university system in a procedurally similar manner insofar as budgeting was concerned, the much larger and more complex activities at the Manoa campus were not being handled in a manner where they could be meaningfully analyzed and understood by decisionmakers and the affected public.

3. The practice of distributing funds to colleges within the Manoa campus based primarily on prior year allocations tended to keep activities at static levels and to prevent proper consideration from being given to changing needs in the resource distribution process.

4. The budgeting process at the academic department level neither required nor facilitated the review of current operations and was devoid of analysis aimed at bringing resources into balance with needs.

5. The role of enrollment as a budget variable needed to be more clearly recognized and defined.

As we were examining the faculty salary budgetary shortfall in response to the legislative request for this study, we found that most of these weaknesses still pervade UH's budgetary process. Current conditions at UH with respect to these various points are reviewed below.

Inadequate attention to current services portion of the budget. When we looked at UH's budgeting six years ago, we found that development of an overwhelmingly large proportion of it was largely an automatic process that involved little if any real scrutiny and analysis. This was because the current services portion of the budget, constituting some 98 percent of the total, was computerized and had become largely a mechanical exercise where the UH Budget Office did the computations and simply advised other units within the university system what their current services budgets would be.

Much the same situation continues to prevail, except that it is not being performed as well. This is because UH failed to maintain and keep up to date its PIF system so that it ended up feeding outdated salary information into the budget preparation process for the current biennium. Even now, the system remains dependent upon manual quarterly updates. Of greater concern, however, is the fact that very little analytical attention is given to the vast bulk of UH's budget. This is true despite the fact that shifts and changes are occurring within and among UH's various programs in addition to the fact that overall enrollment has been declining for several years and is expected to decline even more for some years to come. Not the least among changes occurring is an increasing competition for faculty talent in a number of fields which is resulting in rapid rises in faculty salary costs.

Inadequate attention to the UH–Manoa budget. Although UH–Manoa is by far the largest and most complex entity among UH's nine campus units, in terms of budget structure it was treated in the same manner as all the other campus units when we looked at UH's budgeting process. Thus, its entire instructional program was handled as one large funding package even though it consisted of a number of quite diverse colleges and schools, several of which had larger budgets than those of many of the units outside of UH-Manoa. This made it difficult, especially for executive and legislative authorities, to know and understand what the needs were and how resources were being used at UH-Manoa.

Again, this situation remains much the same despite the passage of five years since we submitted our report on UH's budgeting. As brought out above, the faculty salary budgetary shortfall is primarily an UH-Manoa problem. However, it is almost impossible through the budgetary process to get a firm handle on the unique and special conditions which affect UH-Manoa and to deal specifically and appropriately with the problems which relate primarily or exclusively to that campus.

Inappropriate allocation of funds. In our previous look at UH's budgeting practices, we found that funds for UH-Manoa's instructional program continued to be allocated on the basis of prior expenditures despite diverging enrollment trends among that campus's various colleges and schools. As might be expected, this tended to keep programs static and unresponsive to changing needs and thus failed to make the best utilization of available resources.

Although UH has made some attempts to reallocate resources within UH-Manoa in the period since we issued our report, there is still a very strong tendency to maintain the status quo and to follow past patterns in the allocation of available funds. This is amply illustrated by the high priority that was placed upon restoring all UH-Manoa units as closely as possible to their current services bases in the distribution of UH-Manoa's share of the $1.0 million supplemental appropriation for faculty salaries. So long as this tendency prevails, it will remain difficult to adjust and direct resources to where they may be most needed.

Inadequate attention to justifying existing levels of services. Closely associated with the preceding shortcomings found in our earlier study was the failure to require academic departments and colleges on a regular basis to review what they were doing and to justify the current level of services they were providing. It was only requests for additional funding that were subjected to close scrutiny and required conscious justification. As a result, there was not very much concern about unit costs, relative workloads, and small classes.

Not much has changed in the ensuing period. Although some fields have been upgraded in terms of priority attention while others have been downgraded, there is still not much attention being given to such matters as unit costs and relative workloads. The university may make policy choices to emphasize certain fields over others, but these choices may be seriously questioned if they fail to generate adequate student response and enrollments or result in extremely high unit costs. At present, neither new or existing programs are examined in this light.

Failure to consider enrollment variable. When enrollments in institutions of higher education were rapidly rising, considerable attention was focused on the enrollment factor when budget requests were being justified. However, when we looked at UH's budgeting in 1982, enrollments were fairly static, or even decreasing, and we found that almost no attention was being given to enrollment as a budgeting consideration.

In the period since then, there has been a significant decline in UH's enrollment, reflecting a national trend in this regard. Moreover, this decline is expected to persist for some years to come. Nevertheless, as already indicated in previous discussion, enrollments are not being very closely examined in UH's budgetary process. Enrollments translate into workload, of course. Declining workloads provide opportunities to make savings through the elimination of positions. Such savings, in turn, can be used to offset higher salaries granted to new hires or exisitng faculty. Up to now, however, UH has made little use of this option.

Another approach to dealing with shortfalls. UH is not alone with regard to experiencing faculty salary shortfalls. Information from other states indicates that new faculty hires at other institutions tend also to be paid higher salaries than those received by previous incumbents, creating thereby the type of problem facing UH. The Legislative Division of Post Audit of the State of Kansas conducted a study of this matter at four public universities in that state.[11]

The Kansas auditors found that the average salaries for newly hired faculty were higher than the average salaries of former faculty members at three of the four universities. Due to budgetary limitations, this forced some positions to be left vacant. To deal with this problem, the affected universities decided not to fill 31 of 139 vacant positions, or 22 percent of the vacant positions. Of these 31, about half were eliminated altogether and the other half were left vacant indefinitely. Such an option is particularly valid, of course, where workload is declining.

Such an approach appears worth considering at UH in light of the workload trend there. A quick review of some of the pertinent data at UH-Manoa, for example, reveals a faculty workforce remaining at a fairly static level (0.5 percent) in the face of a decreasing student population (12.6 percent) accompanied by a comparable decrease in total student semester credit hours (15.3 percent) as reflected below:

	Fall 1983	Fall 1984	Fall 1985	Fall 1986	Fall 1987	5 Yr. Change
Faculty (FTE)*						
General Fund	1,100.95	1,089.13	1,110.11	1,108.93	1,105.55	+ 0.4%
Other Funds	67.81	69.58	64.06	67.64	68.83	+ 1.5%
Total	1,168.76	1,158.71	1,174.17	1,176.57	1,174.38	+ 0.5%
Students						
Undergraduate	15,091	14,234	13,565	12,709	12,254	-18.8%
Graduates	4,339	4,255	4,283	4,565	4,400	+ 1.4%
Other	1,682	1,534	1,818	1,691	1,794	+ 6.7%
Total	21,112	20,023	19,666	18,965	18,448	-12.6%
S.S.H**	238,874	226,379	218,712	208,782	202,371	-15.3%

Sources: University of Hawaii, University Personnel Office.

Hawaii, Department of Planning and Economic Development, The State of Hawaii Data Book, 1986, December 1986.

University of Hawaii, Institutional Research Office, Course Registration Report, University of Hawaii at Manoa, Fall 1986, Honolulu, March 1987.

University of Hawaii, Institutional Research Office, Fall Enrollment Report, University of Hawaii at Manoa, Fall 1987, Honolulu, January 1988.

*Full-time Equivalence.
**Student Semester Hours.

We are aware that UH-Manoa has a faculty reallocation plan which it says is being carried out. However, this is primarily a redistribution of positions and for the most part does not involve the elimination of positions or holding positions vacant indefinitely. In a few instances, faculty positions have been converted into civil service or APT positions. Normally, this action should result in salary savings as these types of positions are usually paid less than faculty positions. On an overall basis, however, UH does not seem to be considering elimination of positions or keeping positions vacant as a conscious and planned means of avoiding a shortfall in its faculty salary accounts.

The need for UH to consider this approach ties back to the university's more basic need for a comprehensive and integrated approach to its management of human resources. Before it can come up with any permanent solutions to the problems of which the faculty salary budgetary shortfall is only a symptom, UH needs to make a comprehensive review of its staffing requirements and of ways to meet those staffing requirements. In short, it needs a human resources or personnel management plan aimed at dealing with such interrelated matters as staffing requirements (for both faculty and nonfaculty personnel), recruitment, compensation, training, benefits, and staff assessment.

Recommendations

With regard to dealing with the faculty salary budgetary problem at the University of Hawaii, we recommend as follows:

1. The university should reestablish and maintain on a regular basis a centralized position and personnel inventory system. This includes fixing clearly within the administrative structure the responsibility for maintaining this system and providing sufficient resources to carry out this responsibility.

2. The university should reassess carefully the assumptions underlying the preparation of its personal services budget requests with the objective of achieving consistency between them and actual management practices which affect the expenditure of the funds appropriated for personal services.

3. As previously suggested, the university should take heed of the various recommendations it has received in the area of personnel management and should develop and implement a comprehensive and integrated approach to the management of its human resources.

4. The university should also revamp its overall approach to budgeting so as to give clearer review and analytical focus to major budget issues facing the university. More specifically and in line with our previous recommendations, the university should:

- *Expand university community participation in the budget review process to include review of the current services portion of the budget, which constitutes the overwhelming bulk of the budget.*
- *Disaggregate the UH–Manoa instruction program (in the form of supplemental displays to the executive budget) to reflect program and budgetary information for each of that campus's instructional subprograms so that the regents and the Legislature can see how the budget impacts the programs of specific colleges and schools.*
- *Develop a more analytical and need–related approach to the allocation of resources and equip itself to react more quickly and effectively to changes which occur prior to and during the budget execution process, with top level attention being given to relating planned expenditures to changing demands for services and the fulfillment of current objectives.*
- *Conduct budget reviews at the academic department and college levels in terms of such key factors as enrollment trends, class size, faculty workload, and market demand.*

- *Give more attention to enrollment trends as a factor having planning and budgetary implications.*
- *Develop a comprehensive and systematic approach to position reallocations which will emphasize advance planning (projecting likely turnover as well as areas of increasing and decreasing need) and will provide information on the occurrence of vacancies and actions taken with respect to such vacancies.*

NOTES

Chapter 1

1. 1987 Haw. Sess. Laws, Act 216, Section 200.

2. University of Hawaii, Institutional Research Office, *Faculty and Staff Report*, Honolulu, June 1987.

Chapter 2

1. University of Hawaii, Annual Summary of General Fund Transfers (Pursuant to Section 37-74(d), HRS, as amended by Act 320, SLH 1986), Honolulu, July 27, 1987.

2. UH-Hilo, West Oahu College, and the community colleges did not use internal reserves to cover faculty salary shortfalls.

3. The cost data provided includes funds for lecturers and other nonfaculty employees and they do not accurately portray the faculty salary deficit at the UH. However, the UH Budget Office indicated that the bulk of the funds was used to meet faculty salary shortfalls.

4. 1987 Haw. Sess. Laws, Act 216, sec. 200.

5. University of Hawaii, University Budget Office.

6. The shortfall amounts shown include salary shortfalls for both permanent and nonpermanent faculty salaries (i.e., lecturers, student help, etc.).

7. The position inventory file which gives the status of each position (filled or vacant) by source of funding, rank, salary, tenure status, bargaining unit, etc., was not updated for nearly two years.

8. 1987 Haw. Sess. Laws, Act 216, sec. 200.

9. University of Hawaii, University Budget Office.

10. University of Hawaii, University Budget Office.

11. University of Hawaii, University Budget Office.

Chapter 3

1. "Personal Services Inventory – Forms and Procedures," memorandum from Rodney Sakaguchi to Chancellors Joyce Tsunoda, Edward Kormondy, UHM Deans and Directors, and State Director for Vocational Education Inaba, May 21, 1987.

2. University of Hawaii, University Budget Office.

3. The salaries used in this discussion are based on the salary schedule in effect as of August 1, 1986.

4. University of Hawaii, University Personnel Office.

5. University of Hawaii, Board of Regents, Minutes of Regular Meeting, Honolulu, March 18, 1983.

6. Executive Policy E9.204, Incentive Early Retirement, University of Hawaii, March 1983, Revised October 1986.

7. Hawaii, Legislative Auditor, *Management Audit of the University of Hawaii*, Report No. 81–9, Honolulu, 1981.

8. Hawaii, Legislative Auditor, *A Review of the Administrative Reorganization of the University of Hawaii, Authorized by the Board of Regents on November 15, 1985*, Report No. 87–15, 1987.

Hawaii, Legislative Auditor, *An Updated Review of the Administrative Reorganization of the University of Hawaii Authorized by the Board of Regents on November 15, 1985*, Report No. 88–5, 1988.

9. Hawaii, Peat Marwick Main & Co., *Review of Personnel Management at the University of Hawaii*, December 1987.

10. Hawaii, Legislative Auditor, *Budget Review and Analysis of the Higher Education Program (University of Hawaii)*, Report No. 83–8, January 1983.

11. Kansas, Legislative Division of Post Audit, *Performance Audit Report, Replacing Faculty at the Regents' Institutions*, Topeka, February 1987.